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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Michael HECKMEIER et al.		Confirmation No.:	8358
Serial No.:	09/465,006	Examiner:	Shean Chiu Wu
Filed:	December 16, 1999	Group Art Unit:	1756

Title: LIQUID-CRYSTAL MEDIUM, AND ELECTRO-OPTICAL DISPLAY CONTAINING THE LIQUID-CRYSTAL MEDIUM

SUPPLEMENTAL RESPONSE AFTER FINAL REJECTION

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Response is submitted supplemental to the Reply After Final Rejection filed on September 22, 2003.

That Reply referred to a Declaration under 37 C.F.R. § 1.132 but the declaration had not been completed yet and the Reply was inadvertently filed without the declaration. The omission was discussed with the Examiner, Mr. Wu, on September 26, 2003, and a copy of the since-executed declaration is attached hereto. The comments made in the Reply of September 22 regarding the declaration are fully applicable.

Favorable action in accordance with the previously filed Reply is earnestly solicited.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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Date: September 22, 2003

FACSIMILE

Date: 10/7/03

To: Examiner Wu

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MESSAGE, IF ANY. Re: S.N. 09/465,006

Dear Mr. Wu:

Attached is a copy of Supplemental Reply w/Declaration you requested.

John Sopp

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*** ACTIVITY REPORT ***
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compositions This distinction is significant since, as pointed out in the instant specification (page 3, lines 25-29), it is desirable for certain displays to have a dielectric constant perpendicular to the molecular axis, i.e., $\varepsilon_{\perp}$, as large as possible. A large $\varepsilon_{\perp}$ obviously means a smaller ratio of $\varepsilon_{\parallel}/\varepsilon_{\perp}$, as achieved according to the invention and not in the Kondo examples.

Example of Specification	$\Delta\varepsilon$	$\varepsilon_{\parallel}/\varepsilon_{\perp}$
1	6.5	2.38
2	5.5	1.93
3	<0	0.51
4	11.5	2.79
5	5.5	1.93
6	4.1	1.78
7	4.8	1 87
8	3 2	1.58
9	4.9	1.91
10	3 7	1 70
11	4.3	1.81
12	4.8	2.04
13	3.2	1.58
14	4.9	1.89
Comp Example 1	4.3	2.48
Kondo Ex. 17	5.9	1.97
Kondo Ex. 19	4.5	2.37

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 26/09/2003

Michael Heckmeier

em98254Declaration_Heckmeier.doc

I am heading a laboratory in Merck KGaA's department for physical research on liquid crystals.

I am author or co-author of various articles in the field of physical properties of liquid-crystalline materials and their applications in electro-optical displays.

I am inventor or co-inventor of more than 110 inventions in the field of liquid-crystalline materials and their applications in electro-optical displays.

I am an inventor of the above-captioned application and am, therefore, familiar with the invention described therein and with the grounds for rejection made against the claims of the application in the Final Office Action mailed June 18, 2003, from the U S. Patent and Trademark Office, including the Kondo reference, U.S. Patent No 6,210,761.

The following experiments were conducted under my supervision.

The liquid-crystal media shown in each of the examples of the instant specification were tested to determine their dielectric anisotropy, $\Delta\varepsilon$ ($= \varepsilon_{\parallel} - \varepsilon_{\perp}$), and their ratio of dielectric constants parallel and perpendicular to the director, $\varepsilon_{\parallel}/\varepsilon_{\perp}$. The data are shown in the table below It shows that the media of Examples 1, 3, 4 and 12 (and the comparative example) are not within the scope of the instant claims because they do not meet the claim recitation of dielectric anisotropy, $\Delta\varepsilon$, and/or ratio of dielectric anisotropies parallel and perpendicular to the director, $\varepsilon_{\parallel}/\varepsilon_{\perp}$. The same determinations were made for media according to Examples 17 and 19 of the Kondo '761 reference. These data are also shown in the table

The data were determined by methods known in the art, such as discussed at page 22-24 and used in the Examples of the instant specification.

A comparison of the data for applicants' compositions which remain in the claimed scope, i.e., Examples 2, 5-11, 13 and 14, with those of Kondo show that the Kondo media exhibit a significantly increased $\varepsilon_{\parallel}/\varepsilon_{\perp}$ property in comparison to applicants' claimed